

Attorney Docket No.: 0180155

In the Claims:

Claim 1 (currently amended): A method of forming spacers proximate to a gate structure, the method comprising:

forming a first layer over a gate structure and a substrate;
etching the first layer to form a first set of spacers proximate to the gate structure;
forming a second layer over the substrate, the first set of spacers and the gate structure;
forming a third layer over the second layer;
etching the third layer to form a second set of spacers proximate to the first set of spacers; and
dry etching the second set of spacers with a plasma, wherein the second layer prevents the etching of the second set of spacers from substantially affecting the first set of spacers, thereby reducing a contact resistance and allowing a plurality of implant areas to be formed away from the gate structure.

Claim 2 (original): The method of Claim 1, wherein dry etching the second set of spacers uses a dry etch chamber with a bias power configured to be less than a source power, such that free radicals in a plasma dominate the plasma in the dry etch chamber, the plasma being used to etch the second set of spacers.

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Claim 3 (original): The method of Claim 2, wherein the plasma comprises radicals and energized ions.

Claim 4 (original): The method of Claim 1, wherein dry etching the second set of spacers uses a dry etch chamber with a source power of about 700 to about 800 watts and a bias power source of about 0 to about 50 watts.

Claim 5 (original): The method of Claim 1, wherein dry etching the second set of spacers uses a dry etch chamber with a pressure of about 50 to about 70 milliTorr.

Claim 6 (original): The method of Claim 3, wherein the pressure is controlled by a pump and a throttle valve.

Claim 7 (original): The method of Claim 1, wherein dry etching the second set of spacers uses one or more gases with high ionization potentials, the gases creating radicals in a plasma used to etch the second set of spacers.

Claim 8 (original): The method of Claim 1, wherein dry etching the second set of spacers uses a dry etch chamber with added gases, the gases comprising:
about 70 to about 80 sccm hydrogen bromide (HBr);
about 20 to about 30 sccm CF₄;

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about 30 to about 40 sccm SF6; and

about 70 to about 80 sccm Helium.

Claim 9 (original): The method of Claim 1, further comprising implanting dopants in the substrate on opposite sides of the gate structure to form source and drain areas before forming the first layer.

Claim 10 (original): The method of Claim 1, further comprising implanting dopants in the substrate on opposite sides of the gate structure after etching the first layer to form the first set of spacers adjacent to the gate structure and before forming a second layer over the substrate, the first set of spacers and the gate structure.

Claim 11 (original): The method of Claim 1, further comprising implanting dopants in the substrate on opposite sides of the gate structure after etching the third layer to form the second set of spacers proximate to the first set of spacers and before etching the second set of spacers.

Claim 12 (original): The method of Claim 1, further comprising forming a dielectric layer over the substrate and forming the gate structure over the dielectric layer.

Claim 13 (original): The method of Claim 1, wherein the first layer comprises an

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oxide material.

Claim 14 (original): The method of Claim 1, wherein the first layer comprises a nitride material.

Claim 15 (original): The method of Claim 1, further comprising forming a layer of oxide material over the gate structure and the substrate before forming the first layer.

Claim 16 (original): The method of Claim 1, wherein the first layer is about 100 to about 1000 Angstroms thick.

Claim 17 (original): The method of Claim 1, wherein the first layer is deposited.

Claim 18 (original): The method of Claim 1, wherein the first layer is thermally grown.

Claim 19 (original): The method of Claim 1, wherein the first layer is etched using dry plasma etch chemistries.

Claim 20 (original): The method of Claim 1, wherein the second layer comprises an undoped oxide material.

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Claim 21 (original): The method of Claim 1, wherein the second layer is about 50 to about 100 Angstroms thick.

Claim 22 (original): The method of Claim 1, wherein the third layer comprises a polysilicon material.

Claim 23 (original): The method of Claim 1, wherein the third layer is about 100 to about 1500 Angstroms thick.

Claim 24 (original): The method of Claim 1, wherein the third layer is first etched using a polysilicon dry etch.

Claim 25 (original): The method of Claim 1, wherein the second set of spacers are etched using a dry plasma etcher, the etching having polysilicon-to-oxide selectivities of about 20-to-1 to about 100-to-1.

Claim 26 (original): The method of Claim 1, wherein the second set of spacers are etched using a dry plasma etcher, the etching will not penetrate deeper than about 30 to about 50 Angstrom of the second layer.

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Claim 27 (original): The method of Claim 1, wherein the second set of spacers are completely etched.

Claim 28 (original): The method of Claim 1, wherein the third layer comprises a nitride material.

Claim 29 (original): The method of Claim 28, wherein the second set of spacers are isotropically etched using a dry plasma etcher and the isotropic etching has nitride-to-oxide selectivities of about 10-to-1 to about 25-to-1.

Claims 30-31 (canceled).